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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,356	09/19/2003	Stanley James Cartwright	NLF-0316	8184

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EXAMINER

THEXTON, MATTHEW

ART UNIT PAPER NUMBER

1714

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/666,356

Applicant(s)

CARTWRIGHT, STANLEY JAMES

Examiner

Matthew A. Thexton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2006 3/24 & 5/4.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Text of Title 35 USC not Cited***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Specification***

The abstract of the disclosure is objected to because it does not reflect the claimed disclosure. Correction is required. See MPEP § 608.01(b).

### ***Claims Version***

The listing of claims submitted in the paper filed 2006 May 4 has been examined.

### ***Claims Analysis***

Claim 1 is directed to a lubricating oil mixture comprising:

- (a) a major amount of a base oil of lubricating viscosity;
- (b) a combination of neutral and overbased metallic detergents;
- (c) (c1) about 0.06 to 0.15 vol % a zinc dialkyldithiophosphate and  
(c2) about 0.1 to 2.0 vol % of a zinc dialkyldithiocarbamate; and
- (d) about 0.5 to about 2.0 vol % an ashless dihydrocarbylthiocarbamoyl antioxidant, OR about 0.5 to about 1.9 vol % phenolic antioxidants, OR about 0.5 to 3.0 vol % of mixtures.

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Dependent claims 2-5 further limit the types of dihydrocarbylthiocarbamoyl, the presence of phosphorus up to 0.008 weight %, the viscosity, the presence of conventional gas engine oil additives. Claims 2 and 7 further limit the type of dihydrocarbylthiocarbamoyl but do not select it from the group recited in (d) (claim 1) or (c) (claim 6).

Independent claim 6 parallels claim 1, and is directed to methods of enhancing the life of a lubricating oil comprising "adding" thereto the additives recited as in claim 1. Claims 7-10 parallel claims 2-5.

Claims 2 and 7 further limit the type of dihydrocarbylthiocarbamoyl but do not select it from the group recited in (d) (claim 1) or (c) (claim 6).

### **35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim(s) Rejection(s)***

Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Inoue et al (US 5744430A).

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The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '430 discloses mixtures comprising lubricating oil plus overbased calcium salicylate plus calcium sulfonate plus ZDTP plus phenol plus zinc dipentylidithiocarbamate (example 8) in proportions that appear to be encompassed by Applicant's claims. Low viscosity oil is employed.

In the event the reference is deemed to be of not within the proportions of Applicant's claims to sustain a conclusion of anticipation, then it is concluded that it would have been obvious to one of ordinary skill in the art at the time of the invention to have employed varying amounts as broadly suggested by '430 (column 1, line 60 to column 2, line 20).

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abraham et al. (US 5693598A) in view of Cartwright et al (US 6140282A).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '598 discloses lubricating mixtures comprising a thiocarbamate plus a dithiophosphates plus phenol plus overbased detergents (example 14) apparently in the proportions encompassed by Applicant's claims. The zinc salt form for the thiocarbamate is suggested (column 6, lines 31-34). '598 does not disclose a combination of neutral and overbased detergents.

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'282 discloses lubricating mixtures employing combination of neutral and overbased detergents. It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the detergents of '282 in the mixtures of '598 in order to obtain the benefits ascribed thereto since the references are in the same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed varying amounts as broadly suggested by '598 (column 21, lines 31-61, column 24, lines 1-5). Low viscosity oil is suggested (column 3, lines 40-58).

#### ***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following were cited in Applicant's description, and are cited to complete the record: US 6191081B1; US 5726133A; US 5569405A.

#### ***Response to Amendments and Arguments***

Applicant's arguments, see page 3 of response, filed 2006 March 24, with respect to the rejection(s) of claim(s) 1-10 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Inoue et al (US 5744430A) and in view of Abraham et al. (US 5693598A) in view of Cartwright et al (US 6140282A).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Tuesday-Friday, 10:00 to 7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on 571-272-1119. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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